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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/522,750	03/10/2000	David B. Black	C0375/188130	4939
23370	7590	11/30/2004	EXAMINER	
JOHN S. PRATT, ESQ KILPATRICK STOCKTON, LLP 1100 PEACHTREE STREET ATLANTA, GA 30309			KYLE, CHARLES R	
			ART UNIT	PAPER NUMBER
			3624	

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/522,750

Applicant(s)

BLACK, DAVID B.

Examiner

Charles R Kyle

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213:

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 13-22, 30 and 33-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 13-22, 30 and 33-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/30/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6, 13-22, 30 and 33-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to Claims 1-6, 13-22, 30 and 33-38, they recite the phrase “substantially real time” which is unclear and indefinite. One of ordinary skill in financial arts would not know what the phrase means.

The claims also recite that “posting of the ready for posting messages... can be interspersed”; this is not a positive recitation that posting actually occurs and does not limit the claims.

The Claims also recite the phrase “scheduling a next time for a next activity to be occurred”, which is unclear.

Claim 3 recites “read-for-posting”; it appears that “ready-for-posting” is intended.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-6, 13-22, 30 and 33-38 are rejected under 35 U.S.C. § 101 because, the claimed invention is directed to a non-statutory subject matter. Specifically the method claim as presented does not claim a technological basis in the pre-amble and the body of the claim. Without a claimed basis, the claim may be interpreted in an alternative as involving no more than a manipulation of an abstract idea and therefore non-statutory under 35 U.S.C. 101. In contrast, a method claim that includes in the body of the claim at least one structural / functional interrelationship which can only be computer implemented is considered to have a technological basis [See *Ex parte Bowman*, 61 USPQ2d 1669, 1671 (Bd. Pat. App. & Inter. 2001) - used only for content and reasoning since not precedential].

In order to over come the 101 rejection above, the following preamble is suggested: "A computer implemented method for ---", or something similar. Also, in the body of the claim include at least one structural / functional interrelationship which can only be computer implemented.

Further, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of

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whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

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In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*. However, *State Street* never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Kling et al* in view of *Northington et al*.

Concerning Claim 1, *Kling* discloses the invention substantially as claimed, including in a method for processing transactions to accounts the steps of:

receiving transactions related to a plurality of the accounts (Col. 3, lines 61-64);

converting the transactions into messages (Background of the Invention);

assigning a lower priority to first messages ready for processing relative to a second type of messages (Col. 2, lines 36-50);

processing, with system resources, the second type of messages at the higher priority than messages ready for first types messages (Abstract); and

processing first transactions to the accounts when the system resources are available;

wherein the processing of the transactions can occur in essentially real-time (Col. 5, lines 8-9; Fig 6.) and can be interspersed with the processing of the second type of message (Figure 2).

Kling does not specifically disclose that the first type of message is a posting activity. *Northington* specifically discloses real-time posting activity (Col. 3, lines 21-34) and processing of credit authorization (Col. 16, lines 23-39) for a financial institution (Background of the Invention). These are exactly types of transactions which Applicant interleaves based on resource availability. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have interspersed the posting transactions and credit authorization transactions of *Northington* using the interspersed transaction processing of *Kling* because this would have allowed timely processing of more time- sensitive transactions while making best use of available resources.

Further, *Kling* suggests that posting would be performed in discussion of message types at Col. 5, line 59 to Col. 6, line 19. In this passage, *Kling* discusses account balance inquiry messages and the fact that other types of messages can logically combined by his invention. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a posting type message in the invention of *Kling* because this would have made accurate account balances for inquiry possible. If posting were not done on a timely basis through messages, the financial balance inquiry disclosed would not be possible.

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Applicants have added new claim limitations substantially disclosed by

Northington, as recited below:

retrieving all transactions related to one of the accounts that are within a predetermined historical time period (Col. 13, lines 7-20; Fig. 9, ele. 908; Col. 7, lines 28-44; this limitation is also inherent to accounting functions of maintaining and reviewing an account balance and activity);

first calculating a first new balance for the one account based on the retrieved transactions (Col. 9, line 42 to Col. 10, line 13; this limitation is also inherent to the accounting function of maintaining an account balance based on a new receivable amount);

second calculating a second new balance for the one account based on one of the second type of messages that is related to the one account:

generating an automatic adjustment when there is a difference between the first and second calculating (Col. 13, line 40-59; the second new balance is read as the newly allowed credit limit balance for the account and the second type of message is read as a request for an change in a credit limit);

generating an automatic adjustment when there is a difference between the first and second calculating and updating the one account based on the first calculating, the second calculating, and the automatic adjustment (the difference between the previous account balance when at maximum credit limit and the value of the new credit limit); and

scheduling a next time for a next activity to performed for the one

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account as updated (Col. 14, lines 29-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify *Kling* with this additional disclosure of *Northington* because this would facilitate maintenance of credit limits at appropriate levels for particular customers. Applicants' new limitations are very broad and so allow *Northington* to read on them

As to the limitation that an activity is scheduled based on another transaction not occurring, this would be obvious if there were an interrelationship between two particular transactions.

Concerning Claim 2, *Northington* discloses an authorization request at Col. 13, lines 33-37. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Kling* with the authorization request of *Northington* because this would facilitate processing of requests for increased credit limits.

With respect to Claims 3-4, *Northington* discloses credit accounts at Background and Summary of the Invention; posting of approved charges to such account is inherent to processing credit transactions.

With respect to Claims 5 and 6, *Kling* discloses plural and one at a time transaction receipt at the Abstract, i.e. transaction-interactive and batch-interactive.

As to Claim 13, posting inherently updates account balances.

With respect to Claims 14-15, see the discussion of Claims 2-4 above and note that they are old and well-known functions of credit account processing.

As to Claim 16, *Northington* discloses totaling at Col. 15, lines 18-21. It would have been obvious to one of ordinary skill in the art at the time of the invention to include such totaling in the account maintenance of *Kling* because this would maintain accurate account balances.

With respect to Claims 17-18, see the discussion of credit transaction authorization in the treatment of Claim 1 above, and the additional limitations recite only credit approval by an issuing financial institution or by a third-party credit network.

With respect to Claim 20, *Kling* does not specifically disclose a fee or credit to adjust account differences. Official Notice is taken that it was old and well known to issue such items to customers. For example, an overpayment by a customer would be compensated by a credit to the account. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Kling* with such adjustments because this would avoid unjust enrichment of either seller or buyer.

Concerning Claims 21 and 22, *Kling* discloses statements and letters at Fig. 3, eles. 303 and 311.

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With respect to Claims 33 and 34, see the discussion of Claim 1 regarding receivables and credit limit balance maintenance. Claim 33 recites adjustment of the second balance (credit limit balance) based on a “contribution” from the first balance. This is read as the increase or decrease of the credit limit balance depending on activity in the amount receivable.

With respect to Claims 35 and 36, see the discussions above.

With respect to Claim 37, it would have been obvious to refer to historical activity within the account period because this would provide most current and most relevant historical account activity.

Concerning Claim 38, Official Notice is taken that it is old and well to stagger payment due dates for accounts receivable. For example, it was known to have differing due dates for bills for persons whose names begin with differing letters. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Kling* to include such staggered periods for processing to evenly distribute bill processing over time.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Kling et al* in view of *Northington et al* and further in view of *Rosenwald*.

With respect to Claim 19, *Kling* discloses the invention substantially as claimed. See the discussion of Claim 1 above. *Kling* does not specifically disclose the sorting of transactions by effective date. *Rosenwald* discloses this limitation at Fig. 5 and related text. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Kling* with the transaction sorting of *Rosenwald* because this would provide proper sequencing of items of account activity. For example, one would not calculate a discount on a purchase which was not recorded prior to the discount message/transaction.

Claims 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Kling et al* in view of *Northington et al* and further in view of *Weissman*.

With respect to Claim 30, *Kling* discloses the invention substantially as claimed. See the discussion of Claim 1 above. *Kling* does not specifically disclose propagation of messages relating to accounts and detail accounts among the accounts. *Weissman* discloses group accounts and detail accounts in the account processing environment of *Kling* at Figs. 2-A and 2-B. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify *Kling* to include message propagation and the account structure of *Weissman* because this would provide detailed account structures which were consistent among themselves.

Response to Arguments

Applicant's arguments are addressed above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles R Kyle whose telephone number is (703) 305-4458. The examiner can normally be reached on M-F 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on (703) 308-1065. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7687.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

VINCENT MILLIN
SUPERVISORY PATENT EXAMINER
7700 AVE. COLUMBIA CENTER 3600

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crk

November 24, 2004

Examiner Charles Kyle

A handwritten signature in cursive script, appearing to read "Charles Kyle", with a stylized flourish at the end.